In the claims:

Claims 1-29 (canceled).

30. (amended) A method for treating a pulmonary disease state in mammals by protecting indigenous *in vivo* levels of nitric oxide in mammalian cells during ozone inhalation above ambient levels comprising contacting the mammalian cells with a therapeutically effective amount of a nitric oxide mediator, wherein the nitric oxide mediator is selected from the group consisting of pyruvates, pyruvate precursors, α-keto acids having four or more carbon atoms, precursors of α-keto acids having four or more carbon atoms, and the salts thereof.

31. (previously presented) The method according to claim 30, wherein the pyruvates are selected from the group consisting of pyruvic acid, lithium pyruvate, sodium pyruvate, potassium pyruvate, magnesium pyruvate, calcium pyruvate, zinc pyruvate, manganese pyruvate, and mixtures thereof.

32. (previously presented) The method according to claim 30, wherein the pyruvate precursors are selected from the group consisting of pyruvyl-glycine, pyruvyl-alanine, pyruvyl-leucine, pyruvyl-valine, pyruvyl-isoleucine, pyruvyl-phenylalanine, pyruvamide, salts of pyruvic acid, and mixtures thereof.

33. (previously presented) The method according to claim 30, wherein the α-keto acids having four or more carbon atoms are selected from the group consisting of oxaloacetic acid, keto-glutaric acid, keto-butyric acid, keto-adipic acid, keto-caproic acid, keto-isovaleric acid, their salts and mixtures thereof.

34. (previously presented) The method according to claim 30, wherein the precursors of α-keto acids having four or more carbon atoms are selected from the group consisting of α-

keto acid-glycine, α-keto acid-cystine, α-keto acid-alanine, α-keto acid-leucine, α-keto acid-valine, α-keto acid-isoleucine, α-keto acid-phenylalanine, α-keto amide, their salts and mixtures thereof.

35. (previously presented) The method according to claim 30, wherein the disease state is selected from the group consisting of primary pulmonary hypertension, chronic obstructive pulmonary disease, adult respiratory distress syndrome, congenital heart disease, cystic fibrosis, sarcoidosis, cor pulmonale, pulmonary embolism, bronchiectasis, emphysema, Pickwickian syndrome, sleep apnea, congestive heart failure, and valvular heart disease.

36. (previously presented) The method according to claim 30, wherein the nitric oxide mediator is present in an amount from about 0.1 millimoles to about 5 millimoles.

37. (previously presented) The method according to claim 36, wherein the nitric oxide mediator is present in an amount from about 0.2 millimoles to about 4.0 millimoles.

38. (previously presented) The method according to claim 30, further comprising contacting the mammalian cells with a nitric oxide source selected from the group consisting of nitric oxide, nitric oxide precursors, nitric oxide stimulators, nitric oxide donors, and nitric oxide analogs.

39. (previously presented) The method according to claim 38, wherein the nitric oxide source is nitric oxide.

40. (previously presented) The method according to claim 38, wherein the nitric oxide source is selected from the group consisting of L-arginine, ADP, arachidonic acid, nitrogylcerin, nitroprusside, Sin-1 and SNAP.

41. (previously presented) The method according to claim 38, wherein the nitric oxide source is present in an amount from about 10ppm to about 50ppm.

42. (previously presented) The method according to claim 41, wherein the nitric oxide source is present in an amount from about 15ppm to about 45ppm.

43. (previously presented) The method according to claim 38, wherein the nitric oxide mediator is administered prior to administration of the nitric oxide source.

44. (previously presented) The method according to claim 38, wherein the nitric oxide mediator is administered concomitantly with administration of the nitric oxide source.

45. (previously presented) The method according to claim 38, wherein the nitric oxide mediator is administered after administration of the nitric oxide mediator.

46. (previously presented) The method according to claim 30, further comprising contacting the mammalian cells with a therapeutic agent.

47. (previously presented) The method according to claim 46, wherein the therapeutic agent is selected from the group consisting of antibacterials, antivirals, antifungals, antitumors, antihistamines, proteins, enzymes, hormones, nonsteroidal anti-inflammatories, cytokines, and steroids.

48. (previously presented) The method according to claim 46, wherein the therapeutic agent is administered prior to administration of the nitric oxide mediator.

49. (previously presented) The method according to claim 46, wherein the therapeutic agent is administered concomitantly with administration of the nitric oxide mediator.

50. (previously presented) The method according to claim 46, wherein the therapeutic agent is administered after administration of the nitric oxide mediator,

51. (previously presented) The method according to claim 30, wherein the nitric oxide mediator is inhaled.